

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE



In re application of:
R. DICKINSON, et al.

Serial No.: 08/427,070

Filed: April 24, 1995

For: **MAGNETIC RESONANCE
APPARATUS**

Examiner: B. CASLER

Art Unit: 3305

#13/12/19

Date of Notice of Appeal:
August 4, 1997

Attorney Docket No.:
PKR 2 363-4

Cleveland, Ohio 44114-2518
December 4, 1997

APPELLANTS' BRIEF UNDER 37 CFR §1.192

Box AF
Assistant Commissioner for Patents
Washington, D.C. 20231

Dear Sir:

This is an Appeal to the Board of Appeals from the final rejection in the Official Action of March 4, 1997 of **claims 14-17** of the subject application.

I. Real Party in Interest

This application is owned by PICKER INTERNATIONAL, LTD., as recorded with the United States Patent and Trademark Office on April 5, 1990 at Reel 5268, Frames 0300 and 0301.

II. Related Appeals and Interferences

This application is not involved in any related appeals or interferences.

III. Status of the Claims

aims 1-13 stand allowed.
Claims 14-17, all remaining in the present application, have been finally rejected in the Office Action dated March 4, 1997. A correct copy of the claims involved in the appeal (i.e., **claims 14-17**), as they stand after the

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last amendment (May 30, 1997), appears in Appendix A attached hereto. The claims which appear in Appendix A are underlined in accordance with 37 CFR §1.173. For ease of reading, a copy of **claims 14-17** without any underlining appears in Appendix B.

IV. Status of Amendments Previously Submitted

Applicants submitted Reissue Amendment A on November 8, 1996 requesting amendment of **claims 14 and 16**. The amendment to **claim 16** was not entered. Applicants subsequently submitted Request for Reconsideration and Reissue Amendment B - After Final on May 30, 1997, proposing amendments for **claims 14 and 16**, after issuance of the final Office Action. An Advisory Action mailed July 2, 1997 indicates Reissue Amendment B - After Final would be entered upon the filing of the appeal.

V. Summary of the Invention

The present application is directed to an MRI system including an NMR polarizing magnet. The magnet has opposed upper and lower horizontal poles 1 defining a MRI image volume within a gap between the poles. The gap is open about at least three sides (FIGURE 6). A movable patient transport 31 has spaced-apart structures 32, particularly rails or rollers, supporting a horizontal patient bed 33 and depending therefrom and defining an opening under the bed sized to pass the lower magnet pole 1 therethrough while interjecting the patient bed 33 into the gap. (The rails or rollers 32 inherently define an aperture in the undercarriage; see column 3, lines 38-40 of the present reissue application.) Such a design permits substantially adjacent patient access along a side of the patient while the patient is positioned within the MRI image volume. (See column 3, lines 36-53 of the present reissue application). The patient bed may be moved in at least two dimensions with respect to the spaced-apart structures. (FIGURE 4 illustrates and column 3, lines 34-41 of the present reissue application describe how the table portion 31 is movable along a first horizontal axis. FIGURE 4 illustrates and column 3, lines 42-53 of the present reissue application

describe how the patient platter 33 is capable of translational movement in two directions, as illustrated by arrows A and B in FIGURE 3 of the present reissue application.)

VI. Issue

1. Whether claims 14-17 are properly rejected under 35 U.S.C. §103 as being unpatentable over Matsutani (U.S. Patent No. 4,875,485) in view of LeVein (U.S. Patent No. 4,230,129).

VII. Grouping of Claims

Claims 14-17 stand or fall together.

VIII. Argument

Claims 14-17 stand rejected under 35 U.S.C. §103 as being unpatentable over Matsutani (U.S. Patent No. 4,875,485) in view of LeVein (U.S. Patent No. 4,230,129).

Applicants maintain, as pointed out in detail in the Preliminary Submission of April 24, 1995, the present claims are substantially exactly copied from claims 2, 5, 10 and 11 of U.S. Patent No. 5,305,749 of Li et al. for purposes of invoking an interference. The applicants request reconsideration of the Examiner's rejection of the claims of an issued U.S. Letters Patent.

The Li et al. patent was filed September 24, 1992. The present reissue application was filed April 24, 1995. The present reissue application claims priority to the filing date (November 27, 1989) of its parent application, U.S. Serial No. 07/441,637 and also claims priority to the filing date (December 9, 1988) of U.K. Priority Application No. 8828810. Applicants were the first to invent the present invention and request the opportunity to prove that fact during an interference.

Furthermore, applicants respectfully point out that the Li et al. patent was filed three years after the Matsutani patent issued and twelve years after the LeVein patent issued. Therefore, Matsutani and LeVein were available as prior art

references when the search was performed for the claims of the Li et al. patent. However, those references did not prevent the issuance of the Li et al. patent.

For the reasons stated above, **claims 14 and 16** are patentable. As dependent **claims 15 and 17** depend from and further limit independent **claims 14 and 16**, respectively, it is submitted they are also patentable.

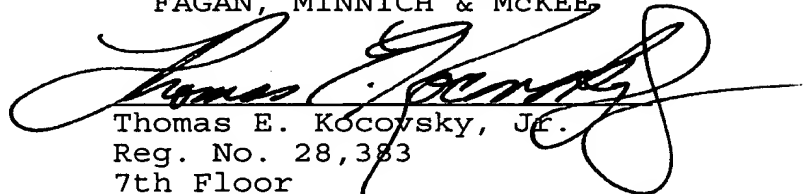
Alternatively, if the combination of Matsutani and LeVeen is held to render **claims 14-17** of the present reissue application obvious under 35 U.S.C. §103, applicants believe **claims 2, 5, 10 and 11** of U.S. Patent No. 5,305,749 to Li et al. are invalid. In this situation, the Commissioner should invoke Section 2239 of the MPEP to order a reexamination of the Li et al. patent. Prosecution of the present application should be suspended during such reexamination.

IX. Conclusion

For the foregoing reasons, it is submitted that **claims 1-17** distinguish patentably over the cited references and meet the other statutory requirements. An early allowance of all claims is earnestly solicited.

Respectfully submitted,


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FAGAN, MINNICH & MCKEE



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CERTIFICATE OF MAILING

I hereby certify that these APPELLANTS' BRIEF UNDER 37 CFR §1.192, Appendix A and Appendix B are being deposited in triplicate with the United States Postal Service as first class mail in an envelope addressed to: Box AF, Assistant Commissioner for Patents, Washington, D.C. 20231 on this 4th day of December, 1997.



Dottie M. Freeland

APPENDIX A - Claims
(Reissue Serial No. 08/427,070)

14. In an MRI system including an NMR polarizing magnet having opposed upper and lower horizontal poles defining a MRI image volume within a gap between the poles that is open about at least three sides, the improvement
5 comprising:

a movable patient transport having spaced-apart structures supporting a horizontal patient bed and depending therefrom and defining an opening under the bed sized to pass said lower magnet pole therethrough while interjecting the
10 patient bed into said gap so as to permit substantially adjacent patient access along a side of the patient while the patient is positioned within the MRI image volume.

15. A MRI system as in claim 14 wherein said movable patient transport comprises:

means for moving the patient bed in at least two dimensions with respect to said spaced-apart structures.

16. A method for positioning a patient for MRI using an NMR polarizing magnet with a C-shaped cross-section, said method comprising:

placing said patient on a movable bed having an
5 aperture in an undercarriage disposed below the bed;

moving said bed into juxta-position with an open gap of the C-shaped magnet; and,

moving said bed into said open gap while moving said aperture therebelow over a lower pole face of the magnet thus
10 leaving unobstructed adjacent access to the patient along an entire patient body side while the patient is disposed within said open gap.

17. A method as in claim 16 further comprising:
further adjusting the bed position within the gap along at least two dimensions with respect to said undercarriage after the bed has been located within the gap
5 and the undercarriage has been positioned over the lower pole face.

APPENDIX B - Claims (Without Underlining)
(Reissue Serial No. 08/427,070)

14. In an MRI system including an NMR polarizing magnet having opposed upper and lower horizontal poles defining a MRI image volume within a gap between the poles that is open about at least three sides, the improvement
5 comprising:

a movable patient transport having spaced-apart structures supporting a horizontal patient bed and depending therefrom and defining an opening under the bed sized to pass said lower magnet pole therethrough while interjecting the
10 patient bed into said gap so as to permit substantially adjacent patient access along a side of the patient while the patient is positioned within the MRI image volume.

15. A MRI system as in claim 14 wherein said movable patient transport comprises:

means for moving the patient bed in at least two dimensions with respect to said spaced-apart structures.

16. A method for positioning a patient for MRI using an NMR polarizing magnet with a C-shaped cross-section, said method comprising:

placing said patient on a movable bed having an
5 aperture in an undercarriage disposed below the bed;

moving said bed into juxta-position with an open gap of the C-shaped magnet; and,

moving said bed into said open gap while moving said aperture therebelow over a lower pole face of the magnet thus
10 leaving unobstructed adjacent access to the patient along an entire patient body side while the patient is disposed within said open gap.

17. A method as in claim 16 further comprising:
further adjusting the bed position within the gap along at least two dimensions with respect to said undercarriage after the bed has been located within the gap
5 and the undercarriage has been positioned over the lower pole face.



Assistant Commissioner For Patents
Washington, D.C. 20231

Attention: BOARD OF PATENTS APPEALS
AND INTERFERENCES

TRANSMITTAL OF APPEAL BRIEF
(REISSUE PATENT APPLICATION) - 37 C.F.R. §1.192

Dear Sir:

1. Transmitted herewith in triplicate is the Appeal Brief in this application with respect to the Notice of Appeal filed on August 4, 1997.

2. **Status of Applicant**

This application is on behalf of

☒ other than a small entity

☐ small entity

Verified Statement:

☐ attached

☐ already filed

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3. **Fee For Filing Appeal Brief**

Pursuant to 37 C.F.R. §1.17(f) the fee for filing the Appeal Brief is:

☒ other than a small entity \$ 310.00

☐ small entity \$ 155.00

Appeal Brief fee due \$ 310.00

4. **Extension of Term**

The proceedings herein are for a reissue patent application and the provisions of 37 C.F.R. §1.136 apply.

- ☒ Applicant petitions for an extension of time under 37 C.F.R. §1.136 (fees: 37 C.F.R. §1.17(a)-(d)) for the total number of months checked below:

Extension (months)	Fee for other than small entity	Fee for small entity
<input type="checkbox"/> one month	110.00	55.00
<input checked="" type="checkbox"/> two months	400.00	200.00
<input type="checkbox"/> three months	950.00	475.00
<input type="checkbox"/> four months	1,510.00	755.00

Extension Fee \$ 400.00

If an additional extension of time is required, please consider this a petition therefor.

- ☐ An extension for _____ months has already been secured and the fee paid therefor of \$_____ is deducted from the total fee due for the total months of extension now requested.

Extension Fee due with this request \$__

or

- ☒ Extension Fee due with this request \$ 400.00

or

- ☐ Applicant believes that no extension of term is required. However, this conditional petition is being made to provide for the possibility that Applicant has inadvertently overlooked the need for a petition and fee for extension of time.

5. Total Fee Due

The total fee due is:

Appeal Brief fee	\$ <u>310.00</u>
Extension Fee (if any)	\$ <u>400.00</u>

TOTAL FEE DUE \$ 710.00

6. Fee Payment

- ☒ Attached is a check in the sum of \$ 310.00 and \$400.00.
- ☐ Charge Account No. 06-0308 the sum of \$____.
A duplicate of this transmittal is attached.

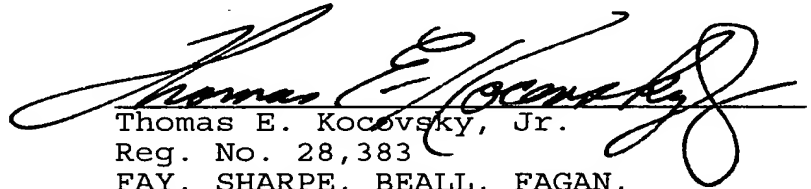
7. Fee Deficiency

☒ If any additional extension and/or fee is required, this is a request therefor and to charge Account No. 06-0308.

AND/OR

☒ If any additional fee for claims is required, charge Account No. **06-0308**

Respectfully submitted,



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CERTIFICATE OF MAILING

I hereby certify that this Transmittal of Appeal Brief (Reissue Patent Application) - 37 C.F.R. §1.192 is being deposited with the United States Postal Service as 1st class mail addressed to: BOX AF, Assistant Commissioner For Patents, Washington, D.C. 20231, on December 4, 1997.


Dottie M. Freeland